

Title (en)  
ACCELERATION SENSOR

Title (de)  
BESCHLEUNIGUNGSMESSER

Title (fr)  
DETECTEUR D ACCELERATION

Publication  
**EP 1868000 B1 20111214 (EN)**

Application  
**EP 05782315 A 20050908**

Priority  
• JP 2005016542 W 20050908  
• JP 2005006783 W 20050406

Abstract (en)  
[origin: EP1868000A1] An acceleration sensor 1 comprises a base 2 having an XY-substrate face which is parallel to an XY plane, a beam portion 4 in a frame shape which is arranged in a floating state above the XY-substrate face of the base 2, a beam-supporting fixed portion which supports the beam 4 to the base 2 via supporting units 5a and 5b like a beam supported by its both ends, weight portions 7 (7a, 7b) which are arranged so as to float above the XY-substrate face of the base 2, and connecting portions 8 which support the weight portions 7 (7a, 7b) to the beam portion 4 in a cantilever beam shape. The weight portions 7 are configured to be capable of displacement in the three-axis directions of the X-axis direction and the Y-axis direction and the Z-axis direction by the bending deformation of the frame-shaped beam portion 4. The beam portion 4 is provided with an X-axis direction acceleration detecting portion for detecting acceleration based on the bending deformation of the beam portion 4 originating from the displacement of the weight portion 7 which originates from acceleration in the X-axis direction, a Y-axis direction acceleration detecting portion based on the bending deformation of the beam portion 4 from the displacement of the weight portion 7 which originates from acceleration in the Y-axis direction, and a Z-axis direction acceleration detecting portion based on the bending deformation of the beam portion 4 from the displacement of the weight portion 7 which originates from acceleration in the Z-axis direction.

IPC 8 full level  
**G01P 15/00** (2006.01); **G01P 15/12** (2006.01); **G01P 15/18** (2013.01); **H01L 29/84** (2006.01)

CPC (source: EP KR US)  
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Cited by  
EP2327960A4; US8156827B2; US8683864B2; US9500666B2; US10145686B2

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